PRELIMINARY OUTLOOK FOR 1956 WATER SUPPLY IN COLUMBIA BASIN[1/]

As of March 1

By Soil Conservation Service

The water supply outlook for Columbia Basin is excellent. Snowfall throughout the whole basin was consistently above normal for the month of February. The snow pack at this time is one of the more consistent recorded, with no significant areas in the basin having less than 20 percent above average snow cover.

The low altitude snow pack is not only above normal but is underlain by moist soils. The wet soil and the heavy low snow pack can contribute to high streamflow early in the season. Such flows could be extended later into the summer by the extremely heavy high altitude snow pack.

Serious flood potentials exist on many major rivers and along small streams with headwaters at relatively low levels in Washington, Oregon, and Idaho. For the first time in several years the low altitude basins have moist soils and a heavy snow pack. The snow pack increased materially during the first 13 days of March. In years of heavy snowfall such as this, it is particularly important to have authentic reports of snow water content at regular snow course sites.

The heavy snow pack in eastern Oregon and southern Idaho will be beneficial to irrigators along the smaller rivers. Ranchers and farmers report that springs which have been dry for several years are now beginning to flow. Reservoirs which have failed to fill for several years will record steeply increased inflows this season.

The forecasts of flow for some principal streams in the Columbia Basin are as follow:

1/ Statement prepared for March 1956 meeting of Water Management Sub-Committee of CBIAC.

COLUMBIA BASIN STREAMFLOW FORECASTS - MARCH 1, 1956

Basin, Stream and Station		April-Sept. Streamflow in Thousands of Acre Feet Forecast Runoff 1956	% 15-Year Average (1938-52)
COLUMBIA RIVER			
Birchbank[1/]	(at)	50,300	126
Grand Coulee[2/]	(at)	77,000	124
Trinidad[3/]	(at)	85,000	126
The Dalles[3/]	(nr)	125,000	129
KOOTENAI RIVER			
Leonia	(at)	10,200	128
CLARK FORK RIVER			
St. Regis	(at)	5,035	127
FLATHEAD RIVER			
Columbia Falls[4/]	(at)	6,922	123
Polson[5/]	(nr)	8,108	124
South Fork			
Columbia Falls[4/]	(nr)	2,557	124
SPOKANE RIVER			
Post Falls[6/]	(at)	3,850	140
OKANOGAN RIVER			
Tonasket	(nr)	2,679	162
YAKIMA RIVER			
Parker[7/]	(nr)	2,894	181
SNAKE RIVER			
Heise[8/]	(nr)	4,800	125
Boise River			
Boise ab. Diversion[9/]		2,250	141
Owyhee River			
Owyhee Res. net inflow[10/]		575[11/]	101[11/]
Payette River			
Horseshoe Bend[12/]		2,750	146
Salmon River			
Whitebird	(at)	8,000	122
Clearwater River			
Spalding	(at)	10,000	123

1/ Observed flow corrected for storage in Kootenay Lake.
2/ Observed flow corrected for storage in F.D.Roosevelt, Kootenay, Pend Oreille, Flathead, Hungry Horse, Coeur d'Alene reservoirs and Grand Coulee Equalizer.
3/ Observed flow corrected for storage in F.D.Roosevelt, Kootenay, Pend Oreille, Flathead, Hungry Horse, Lake Chelan, Coeur d'Alene reservoirs, and Grand Coulee Equalizer.
4/ Observed flow corrected for change in storage in Hungry Horse Reservoir.
5/ Observed flow corrected for change in storage in Flathead Lake and Hungry Horse Reservoir.
6/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.
7/ Observed flow corrected for storage in 5 Yakima res. plus upstream diversion.

8/ Observed flow corrected for storage in Jackson Lake.
9/ Observed flow corrected for storage in Arrowrock, Anderson Ranch Reservoir and Lucky Peak.
10/ From USBR records of inflow.
11/ March-July forecast period.
12/ Observed flow corrected for change of storage in Cascade and Deadwood Reservoirs.

For its own operational purposes and to meet requests for information from cooperators in soil conservation districts located along flood plains of certain streams, the Service has developed the following estimates of April-June runoff:

Columbia at The Dalles	-	85,000,000 acre-feet
Kootenai at Bonners Ferry	-	7,800,000 acre-feet.

These April-June volume forecasts can be related to most probable peak flows in the following amounts:

Columbia at The Dalles	-	800,000 cfs*
Kootenai at Bonners Ferry		87,500 cfs

*Subject to reduction by upstream reservoirs.

The exact peak flows to be realized will be strongly influenced by melt conditions later in the season.

As the melt season progresses both the runoff volume and the peak volume relationships alter. The Service expects to secure for its cooperators, and for the public, information of changing snow packs as the melt season progresses. Forecasts of volume and flow distribution will be revised as necessary.

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Columbia Basin
Report of Selected Snow Surveys
for Water Management Sub-Committee CBIAC
by USDA - SCS - March 15, 1956

Drainage Basin and Snow Course	Water Equivalent of Snow				March 1 as % of April 1st Water Content (1938-52)
	About March 1 1956		About February 1 1956		
	Inches	% of 1938-52 Average	Inches	% of 1938-52 Average	
Upper Columbia and Kootenay in British Columbia					
Glacier No. 11	22.5	114	16.3	113	96
Sinclair Pass	6.5	107	5.9	134	130
Gray Creek	17.0	99	12.9	102	83
Nelson	21.8	165	16.5	168	158
Upper Columbia in United States					
Marias Pass (Mont.)	20.8	133	13.3	113	118
Desert Mountain (Mont.)	18.5	147	12.4	115	120
Storm Lake No. 2 (Mont.)	15.8	-	12.4	-	108
Coyote Hill (Mont.)	11.2	92	8.9	86	98
Stampede Pass (Wash.)	60.0	130	52.0	149	112
Stevens Pass (Wash.)	62.1	134	51.2	145	113
White Pass (Wash.)	48.4	-	38.0	-	107
Lookout (Idaho)	51.6	168	37.5	167	154
Snake					
Gibbons Pass (Mont.)	27.2	133	22.7	153	116
Teton Pass No. 2 (Wyo.)	42.4	129	35.6	142	107
Moores Creek (Idaho)	43.0	155	32.1	145	139
Bogus Basin (Idaho)	25.0	120	18.5	116	92
Willamette and Lower Columbia					
Tollgate (Ore.)	29.2	114	21.4	127	105
Meacham (Ore.)	13.8	148	8.0	131	159
Hogg Pass (Ore.)	41.5	104	37.4	136	95
Cascade Summit (Ore.)	32.7	102	29.2	147	102
Average for Basin		127%		133%	116%